FLOOD-STAGE REPORT FOR JULY 1941-Continued

[All dates in July unless otherwise specified]

River and station	Flood	Above stages-		Crest		
	stage	From-	То	Stage	Date	
MISSISSIPPI SYSTEMcon.						
Arkansas Basin			ŀ		İ	
North Canadian: Woodward, Okla Canton, Okla	9	7 8	7 8	Feet 5. 4 9. 0 10. 5	7 8 2	
Yukon, Okla	8	(²)	(1)	13. ŏ	9-10	
Canadian:	!					
Canadian, Tex		8 26	6 26	6.0 7.0	6 26	
Union, Okla	7	26	27	9.0	26	
Red Basin Sulphur: Ringo Crossing, Tex. ⁵ . Naples, Tex.	20 22	12 20	23 27	28. 5 25. 6	16 22	
WEST GULF OF MEXICO DRAINAGE		10		200		
Sabine: Logansport, La	25	June 30	8	6 25.8	63	
Dallas, Tex	28	June 11	2	43.0	June 12	
Trinidad, Tex.	28	June 7	4 10	28. 4 45. 4	June 19	
Long Lake, Tex Liberty, Tex	40 24	June 14 June 11	7 24	46. 5 26. 8	June 22 11-12	

FLOOD LOSSES AND SAVINGS FOR 1940

By BENNETT SWENSON

The monetary losses from floods during the year have been estimated at more than \$40,000,000 and a total of 60 lives were lost. The savings as the result of the river and flood warning service is reported to have amounted to about 6½ million dollars. The average annual loss for the period 1924 to 1940, inclusive, is about \$94,000,000 and the average annual savings nearly \$15,000,000. The losses and savings during the year 1940 are itemized by individual river basins in the table below.

The outstanding floods of 1940 were the floods of August in the rivers in southern Virginia, the Carolinas, and eastern Tennessee which resulted from heavy rains accompanying the passage inland of a tropical disturbance. The total losses from these floods have been estimated at about \$12,000,000 and 40 lives.

Another tropical disturbance which moved inland over southwestern Louisiana and eastern Texas during August was responsible for severe flooding in that area, with damages amounting to about \$6,000,000, mostly to growing crops.

Other important floods occurred in the Sacramento River in February and March with losses estimated at about \$8,000,000, and in the small streams of northeastern Nebraska during June where damages amounted to nearly \$2,000,000 and five lives were lost.

Estimated flood losses and savings for 1940

River and drainage	Tangible property	Matured crops	Prospec- tive crops	Livestock and other movable farm prop- erty	Suspension of business	Total	Lives lost	Reported savings as the result of warnings
Red Cedar River							2	
Connecticut River.			\$50,000		\$12,500	\$62, 500		\$22,000
Rivers in southwest New Jersey	*1 000 000		\$50,000		\$12,000	1,000,000	4	\$22,000
Schuylkili River		\$50	50	\$100		200		1, 250
Susquehanna River.		, ,	24, 375	27,000	126,000	1, 456, 375		313, 500
James River		5,000	50,000	2,600	9, 625	91, 525		190, 800
Roanoke River		980,000	306,000	202,000	380,000	2, 913, 500	14	891, 500
Tar River		10,000	150,000	4,500	10,000	224, 500		20,000
Neuse River		6,000	6,000	2,400	3,000	27, 400		15,000
Pee Dee River 2						3, 200	14	10,000
Santee River		58,000	8, 200	2, 200	33, 900	273, 300	11	92, 700
Savannah River	1, 452, 000	20,000		8,000	20, 500	1, 500, 500	3	2,000,000
			;	}				ļ
Apalachicola River	į :		ļ	250	6, 800	7, 150		4 500
Choctowhatchee River		3, 540	300	350 1, 100	6,000	25, 940		4, 500 3, 000
Black Warrior-Tombigbee River	206, 050	0, 040	4, 685, 750	2,000	38, 200			99, 600
Pearl and Pascagoula Rivers	131, 218	80, 100	240, 500	16, 325	63, 250	531, 393		91, 800
MISSISSIPPI SYSTEM	10.1	0.7200	,	7,000	1.,24	,		
B(103[35])[111 5161 PM	1							
Upper Mississippi Busin	1 1				1	1		
Zumbro River (Minn.)			5,000			5,000		
Wisconsin River	5, 740	4, 280	13, 460		13, 360	36, 8 4 0		44, 050
Yellow, Volga, and Turkey Rivers in northeast Iowa	83, 570	27, 300	40, 250	3, 855	2, 500	157, 475		
Missouri Basin	0.700				}	9 700		
Rivers in Montana		100, 000	1, 000, 000	100,000	13,000	2, 700 1, 713, 000	5	30, 000
Streams in northeast Nebraska Floyd River		100,000	1,000,000	100,000	19,000	12,000	9 }	30, 000
Kansas River			17. 500					
			,					
Ohio Basin	1	į		1			- 1	
Allegheny River						201, 300		17,000
Monongahela River						700 42, 500		10, 000
Scioto River		73-105-000-	16, 500			\$ 2, 855, 500	19	
New-Kanawha River		4 1, 195, 000	17, 800		15,000			33, 000
East Fork of White River		38,000	77, 500	1,000	4, 100			52,000
West Fork of White River		30, 100		1,000	3, 250			9, 100
White River (Ind.)					15, 000			4, 500
Wabash River	15, 500	450			2,600			26,000
Watauga River			6 82, 200		100,000	1, 285, 000	1 13	5, 000
Holston River	6 46, 100		6 49, 900			96, 000		10,000
French Broad River	4 1, 880, 100							65, 000
Little Tennessee River						520,000	14	
Tennessee River						34, 000		6,000
Clinch River	6 83, 000		14,000			97, 000	12	7,000
Ohio River	63,600	500	115, 075	6, 800	139, 950	325, 925		110,000

Continued into following month.
Continued from preceding month.
An estimated 1.0 to 1.5 feet of rise due to back water from dam (Santee-Cooper project).
Occasionally above flood stage due to operations of Dam No. 24.
Stages estimated.

No report July 4-6; crest of flood probably about 26.1 on 5th.

Estimated flood losses and savings for 1940—Continued

River and drainage	Tangible property	Matured crops	Prospec- tive crops	Livestock and other movable farm prop- erty	Suspension of business	Total	Lives lost	Reported savings as the result of warnings
mississippi system—continued								
White Basin Black River (Ark.) White River (Ark.)			\$1,000 10,500			\$1,000 10,500		
Arkansas Basin Chisholm Creek (Kans.)	\$4,000 16,200 70,000 1,120,000	\$4,500 10,000 10,000	7, 300 8, 000 45, 000	423 000	\$500	4, 090 28, 500 88, 000 1, 200, 000		
Red Basin Sulphur RiverOuachita River		800 500	500	1,000	7, 000 500	10, 800 1, 000		\$11,000 1,000
WEST GULF OF MEXICO						-		
Rivers in southwest Louisiana. Trinity River Colorado River Guadalupe River Lavaca River	900, 000 12, 000 154, 000 62, 500 200, 000	70, 000 98, 500 140, 000	4, 901, 000 3, 750 8, 000 16, 000 315, 000	2, 000 8, 500 85, 000	1,500	6, 445, 000 15, 750 234, 000 187, 000 740, 000	7	61, 000 23, 000 46, 500
GULF OF CALIFORNIA								
Colorado Basin	3, 000 50, 000 75, 000	1, 500		500	50, 000	5, 000 50, 000 125, 000		
Sacramento RiverEal River	3, 054, 940 470, 000	683, 020 500	3, 100, 930 23, 000	639, 440 6, 000	248, 180 10, 000	7, 726, 510 509, 500		2, 185, 000 13, 000
Total	17, 792, 318	3, 547, 540	15, 998, 740	1, 791, 670	1, 336, 215	40, 466, 483	60	6, 524, 800

From records furnished by the American Red Cross.
 Incomplete; severe floods occurred in August in the Yadkin River where 4 lives were lost, but figures on losses are not available.
 \$200,000 in Catarangus County, N. Y., in June.
 Includes all agricultural losses.
 From records furnished by United States engineers.
 From records furnished by Tennessee Valley Authority.

CLIMATOLOGICAL DATA

CONDENSED CLIMATOLOGICAL SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS

[For description of tables and charts, see Review, January, p. 31]

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures, with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data as indicated by the several headings.

The mean temperature for each section, the highest and lowest temperatures, the average precipitation, and the

greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course, the number of such records is smaller than the total number of stations.

	The man and the same and the sa							Description							
	Temperature								Precipitation						
		the	Monthly extremes							the	Greatest monthl	У	Least monthly		
Section	Section average	Departure from normal	Station	Highest	Date	Station	Lowest	Date	Section average	Departure from normal	Station	Amount	Station	Amount	
Alabama Arizonia Arkansas California Colorado	° F. 80.6 79.0 81.2 73.4 65.6	° F. +.3 -1.2 +.7 2 -1.6	2 stations Mohawk Corning 2 stations Sedgwick	° F. 100 117 105 124 104	1 30 1 15 2 22 22	Madison Alpine 3 stations Tamarack Pearl	° F. 57 29 53 28 23	8 1 2 1 5 27 11	In. 7.97 1.64 4.82 .08 2.31	In. +2.61 54 +1.00 +.01 +.14	Mobile Airport Ruby Pine Bluff Happy Camp Idalia	In. 16. 54 6. 45 9. 23 1. 92 7. 87	Union Springs Welton Rogers 136 stations 2 stations	In. 2. 94 . 05 . 80 . 00 . 26	
Idaho Illinois Indiana Iowa Kansas Kentucky	81. 3 80. 4 69. 3 77. 0 76. 4 75. 1 79. 0 76. 5 82. 0	+4 +1.2 +.5 +.7 +.4 2 6 +.2	2 stations Eastman Lewiston Mount Vernon Shoals 5 stations Clay Center Earlington Winnfield	101 102 112 105 108 106 110 106 106	31 17 30 1 124 22 2 9	Mason Blairsville Pelton's Ranch Sycamore 4 stations Decorah St. Francis Farmers 2 stations	51	24 18 31 4 20 1 13 1 11 21 5	7. 18 . 73 2. 75 2. 54 2. 24 3. 05 5. 51 8. 04	+2.70 +1.38 +.05 49 78 -1.41 08 +1.32 +1.84	West Palm Beach Airport. Cornelia. Salmon. Harrisburg. Cypress. Keosauqua. Colby. Williamsburg. Paradis (uear)	7. 48 5. 54	Key West	2.87 T .70 .28 .50 .49 2.05	
Maryland-Delaware.	75.4	+.2	Dundalk, Md	104	28	do	42	19	5, 27	+.94	Solomons, Md	9. 22	Chewsville, Md	2.32	

See footnotes at end of table.